

Abstract

A method is disclosed for producing a transgenic cotton plant by *Agrobacterium*-mediated transformation of petiole tissue. The method comprises the steps of

5 (a) obtaining cotton petiole explants, (b) exposing the petiole explants to a culture of *Agrobacterium tumefaciens* that harbors a vector comprising an exogenous gene and a selectable marker, the

10 *Agrobacterium* being capable of effecting the stable transfer of the exogenous gene and selection agent resistance gene to the genome of the cells of the petiole explant, (c) culturing the petiole explants to induce callus formation, (d) selecting transformed

15 callus that expresses the exogenous gene, (e) culturing the selected callus in suspension culture to induce formation of embryoids, (f) regenerating the embryoids into whole transgenic cotton plants.

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